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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,520	01/23/2007	Riccardo Bigolin	048790/310101	6981

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EXAMINER	
SIMONE, CATHERINE A	
ART UNIT	PAPER NUMBER
1794	

MAIL DATE	DELIVERY MODE
12/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/574,520	BIGOLIN, RICCARDO	
	Examiner	Art Unit	
	Catherine Simone	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-26 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-26 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 03 April 2006 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 4/3/06.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5, 6, 8, 10-13 and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Yates (US 6,131,994).

Yates teaches a viscoelastic support structure (Figures 3 and 4) comprising a frame (shell 12), at least one resilient filler layer (30 or 54), a flexible covering (18) having a contact surface for contact with a user, at least one gel insert (30 or 54) interposed between the covering (18) and the frame (12), and a plurality of protuberances (58) and recesses (34) on the insert (col. 3, lines 4-16), and the protuberances (58) and recesses (34) are shown in Figure 3 (see Figure 3 below) to be aligned with respect to a mid-surface line extending at least partially along the length of the structure (col. 3, lines 4-7). Furthermore, the protuberances and recesses would inherently be aligned with respect to a mid-surface line extending at least partially along the length of the structure, since Yates teaches that the protuberances and recesses are sized and spaced apart from one another to enable engagement therebetween upon assembly (Figure 3 and col. 3, lines 4-7).

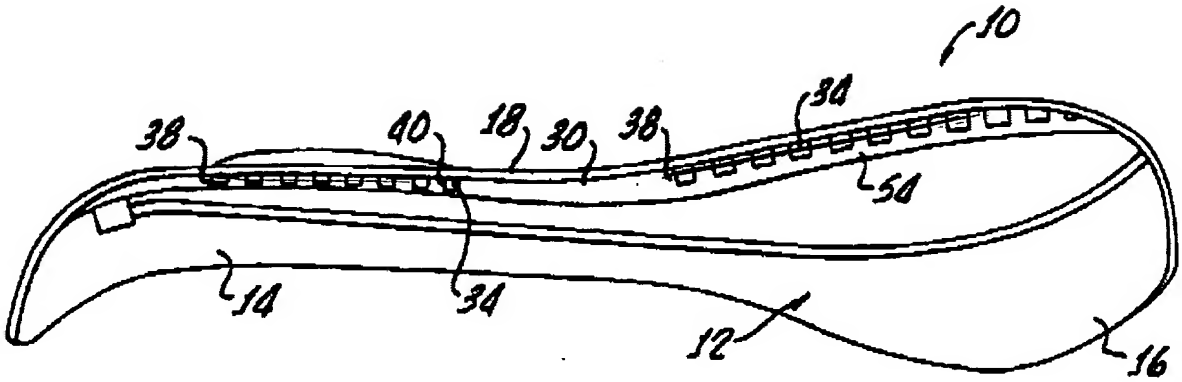

FIG. 3.

Regarding claim 2, note the insert (30 or 54) comprises a top surface and a bottom surface, wherein the protuberances (58) or the recesses (34) are provided on at least one of the top surface and the bottom surface of the insert (Figure 3 and col. 3, lines 4-17).

Regarding claims 5 and 6, note the protuberances would inherently have top surfaces mainly extending along respective first lines and the recesses would inherently have bottom surfaces mainly extending along respective second lines because Yates teaches that the protuberances and cavities are sized and spaced apart from one another in order to enable engagement therebetween upon assembly, which is shown in Figure 3. Thus, the protuberances would inherently have top surfaces mainly extending along respective first lines and the recesses would inherently have bottom surfaces mainly extending along respective second lines in order to have the protuberances and cavities engage one another upon assembly.

Regarding claim 8, the protuberances and recesses disclosed in Yates are shown in Figure 3 to have inclined surfaces for connecting the top surface and the bottom surface and the inclined surfaces inherently would have inclination angles relative to the mid-surface line (see Figure 3 shown above), since again Yates is teaching that the protuberances and cavities are sized and spaced apart from one another in order to enable engagement therebetween upon assembly (col. 3, lines 4-17).

Regarding claim 10, note the filler layer (30 or 54) comprises an enlarged rear (seat) portion (16), a front horn portion (14) and a central portion (between 14 and 16), wherein the rear (seat) portion has at least one through cavity (opening) (col. 1, lines 25-32).

Regarding claim 11, note at least one through cavity (opening) is present in the rear (seat) portion (16) and is positioned in an area generally corresponding to the ischial bones of the user (Figure 2).

Regarding claim 12, the through cavity (opening) is present in the rear (seat) portion (16) and the insert (30 or 54) is received in the through cavity (col. 1, lines 25-32 and Figure 3).

Regarding claim 13, the insert (30 or 54) extends from the frame (12) to the flexible covering (18) (Figure 3 and col.1, lines 25-32).

Regarding claim 21, it is to be noted that it has been held that the recitation that an element is "adapted to" perform a function, i.e. adapted for deformation in a direction transverse to the direction of a stress applied to said insert, only requires the ability to so perform.

Regarding claim 22, it is to be noted that it has been held that the recitation that an element is "adapted to" perform a function, i.e. adapted for deformation in a direct essentially parallel to said mid-surface line, only requires the ability to so perform.

Regarding claim 23, it is to be noted that it has been held that the recitation that an element is "adapted to" perform a function, i.e. adapted for deformation in one or more directions thereby increasing energy dissipation by said insert, only requires the ability to so perform.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yates (US 6,131,994) in view of Yu (US 6,739,656).

Yates teaches the presently claimed viscoelastic support structure as shown above except for protuberances or recesses being provided on the top surface of the frame facing toward the insert.

Yu teaches a base of a bicycle saddle having protuberances (supporting bars 26) provided on the top surface facing toward the insert (foam 14) for the purpose of preventing the break of detachment of the elastic body and providing a comfortable feeling to the bicyclist when the bicyclist sits on the saddle (col. 1, lines 7-9 and col. 2, lines 3-5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the top surface of the frame in Yates with protuberances as suggested

by Yu in order to prevent the break or detachment of the insert (resilient member) and provide a comfortable feeling to the bicyclist when the bicyclist sits on the saddle.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yates (US 6,131,994) in view of Marchello (US 4,451,083).

Yates teaches the presently claimed viscoelastic support structure as shown above except for the flexible covering having protuberances or recesses on its bottom surface facing toward the insert.

Marchello teaches a cover pad for a bicycle saddle having protuberances and recesses on its bottom surface (Figures 5-7) for the purpose of providing more rider comfort and better shock absorption (col. 2, lines 3-18).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the covering of the bicycle saddle in Yates with protuberances and recesses on its bottom surface as suggested by Marchello in order to provide more rider comfort and better shock absorption.

Claims 7 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yates (US 6,131,994).

Yates teaches the presently claimed viscoelastic support structure as shown above except for the first and second lines being straight or curved. It is to be noted that Yates teaches that the protuberances and the recesses are sized and spaced apart from one another to enable engagement therebetween upon assembly (col. 3, lines 3-7). It would have been an obvious

matter of design choice to change the shape of the protuberances and recesses in Yates to have the protuberances having top surfaces extending along curved and/or straight lines and the recesses having bottom surfaces extending along curved and/or straight lines, since such a modification would have involved a mere change in the size of the protuberances and recesses. A change in size or shape is generally recognized as being within the level of ordinary skill in the art, absent unexpected results. MPEP 2144.04 (IV). One of ordinary skill in the art would have been motivated to change the shape of the protuberances and recesses in Yates to have the protuberances having top surfaces extending along curved and/or straight lines and the recesses having bottom surfaces extending along curved and/or straight lines in order to change the design and comfort of the bicycle saddle. It is desirable to change the design and comfort of the bicycle saddle in order to make the saddle more appealing to the consumer.

Claims 9 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yates (US 6,131,994).

Yates teaches the presently claimed viscoelastic support structure as shown above except for the inclined surfaces of the protuberances and recesses having inclination angles being from 5° to 85°, specifically being 45°. It is to be noted that Yates teaches that the protuberances and the recesses are sized and spaced apart from one another to enable engagement therebetween upon assembly (col. 3, lines 3-7). It would have been an obvious matter of design choice to change the shape of the protuberances and recesses in Yates to have inclined surfaces having inclination angles from 5° to 85° and of about 45°, since such a modification would have involved a mere change in the size of the protuberances and recesses. A change in size or shape

is generally recognized as being within the level of ordinary skill in the art, absent unexpected results. MPEP 2144.04 (IV). One of ordinary skill in the art would have been motivated to change the shape of the protuberances and recesses in Yates to have the inclined surfaces having inclination angles from 5° to 85° and of about 45° in order to change the design and comfort of the bicycle saddle. It is desirable to change the design and comfort of the bicycle saddle in order to make the saddle more appealing to the consumer.

Claims 14-18 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yates (US 6,131,994) in view of Bigolin (US 6,136,426).

Yates teaches the presently claimed viscoelastic support structure as shown above except for the gel material of the gel insert being optically transparent, the flexible covering having an optically transparent portion and the transparent portion of the flexible covering being located above the gel insert.

Bigolin teaches a bicycle saddle having a transparent gel insert (8) and a flexible covering (4) having an optically transparent portion (7), which is located above the gel insert, for the purpose of displaying ornamental elements with great visibility, originality and effectiveness and that last without being subjected to deterioration or wear (col. 2, lines 1-15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the saddle in Yates with an optically transparent gel insert and a flexible covering having an optically transparent portion located above the gel insert as suggested by Bigolin in order to display ornamental elements with great visibility, originality and effectiveness and that last without being subjected to deterioration or wear.

Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yates (US 6,131,994) in view of Mesinger et al. (US 3,549,441).

Yates teaches the presently claimed viscoelastic support structure as shown above except for the frame having a polymeric base material that is essentially optically transparent and comprises a ligneous, metal or composite material.

Mesinger teaches a cycle saddle cover having a base layer (22) formed of a transparent plastic composition (col. 3, lines 30-40) for the purpose of providing a decorative appearance (col. 1, lines 13-16 and lines 47-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the base of the shell 12 (frame) in Yates to be essentially optically transparent and be made of a plastic composite as suggested by Mesinger in order to provide the bicycle saddle with a decorative appearance.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (571) 272-1501. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Catherine A. Simone/
Catherine A. Simone
December 9, 2007

KEITH D. HENDRICKS
SUPERVISORY PATENT EXAMINER